

DESCRIPTION

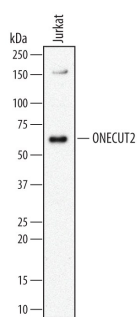
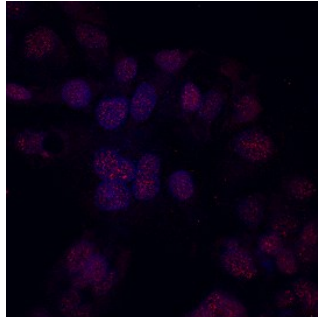
Species Reactivity	Human
Specificity	Detects human ONECUT2/OC-2 in direct ELISAs and Western blots. No cross-reactivity with recombinant human ONECUT is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 606014
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human ONECUT2/OC-2 Gln185-Thr326 Accession # O95948
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human ONECUT2 by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line. PVDF Membrane was probed with 2 µg/mL of Mouse Anti-Human ONECUT2 Monoclonal Antibody (Catalog # MAB6294) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for ONECUT2 at approximately 60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>ONECUT2 in HepG2 Human Cell Line. ONECUT2 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Mouse Anti-Human ONECUT2 Monoclonal Antibody (Catalog # MAB6294) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the Northern-Lights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei (punctate). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

ONECUT2 (one "cut" domain family member 2; also OC-2 and HNF6β) is a monomeric 54 kDa (predicted) member of the One Cut-domain containing class of homeodomain proteins. It is expressed in embryonic neural crest plus hepatic, pancreatic, and intestinal tissue. In the adult, it is found in hepatocytes and small intestine epithelial cells. ONECUT2 is a transcriptional regulator that is known to impact the expression of Ngn3, OPN and Thbs4. This likely contributes to embryonic cell differentiation and migration. Human ONECUT2 is 504 amino acids (aa) in length. It contains two DNA binding regions, one classified as a CUT domain (aa 331-410) and another as a homeobox domain (aa 427-481). There is one potential alternative start site at Met20. Over aa 185-326, human ONECUT2 shares 98% aa identity with mouse ONECUT2.